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COMPUTER SET, DIGITAL: OL-590/TYQ (SAMS-1 CONFIG)  
LIN: C28078 NSN: 7010-01-420-4975 EIC: QTQ  
PREVENTIVE MAINTENANCE CHECKS AND SERVICES

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**Maintenance Level**  
Operator

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## INTRODUCTION

### General

Preventive Maintenance Checks and Services (PMCS) are performed to keep the system in operating condition. The checks are used to find, correct, or report problems. SAMS-1 operators are to do the PMCS jobs as shown in the PMCS table. PMCS are done every day the system is operated, using the PMCS table. Pay attention to WARNING and CAUTION statements. A WARNING means someone could be hurt. A CAUTION means equipment could be damaged.

Operators are not allowed to perform PMCS internally to any hardware.

Before you begin operating the system, do Before PMCS.

During operation, do During PMCS.

After operation, do After PMCS.

Once a week do Weekly PMCS. If the system has not been operated in a week also do Before PMCS at the same time.

Do Monthly PMCS once a month. If the system has not been operated in a month also do After PMCS at the same time.

If you are operating the system for the first time, do Weekly and Monthly PMCS the first time you do your Before PMCS.

If you find a fault when performing PMCS, repair it if you can, using both troubleshooting procedures and maintenance procedures.

The right-hand column of the PMCS table lists conditions that make the system not fully mission capable. Write up items not fixed on DA Form 2404/5988-E, Equipment Inspection and Maintenance Worksheet, for unit maintenance. For further information on how to use this form, see DA PAM 738-750.

If tools required to perform PMCS are not available, notify unit maintenance.

### INSPECTION

Look for signs of a problem or trouble. Senses help here. You can feel, smell, hear, or see many problems. Be alert when operating the system.

Inspect to see if items are in good condition. Are they correctly assembled, stored, secured, excessively worn, or corroded? Correct any faults found, document on a DA Form 2404/5988-E, and notify unit maintenance. There are some common items to check all over the system. They include the following:

1. Bolts, clamps, nuts, and screws: Continuously check for looseness. Look for chipped paint, bare metal, rust or corrosion around bolt and screw heads and nuts. Tighten them when you find them loose. If tools are not available, notify unit maintenance.

2. Welds: The cases of the system are welded. To check these welds, look for chipped paint, rust, corrosion, or gaps. When these faults exist document on a DA Form 2404/5988-E, and notify unit maintenance.

3. Electrical wires, connectors, and harnesses: Tighten loose connectors. Look for cracked or broken insulation, bare wires, and broken connectors. If faults are found document on a DA Form 2404/5988-E, and notify unit maintenance.

## **CLEANING**

### **CAUTION**

Follow all cleaning instructions carefully. Failure to do so can result in damage to equipment.

### **WARNING**

Do not clean the cases or chassis when electrical power is applied. Disconnect all power cables.

Proper cleaning can aid in avoiding maintenance faults or trouble, so make it a habit to do the following:

1. Use a damp (water), lint-free cloth to clean the system unit and monitor. Avoid abrasives or solvents; they can permanently damage the finish.

2. Use a soft cloth and window cleaner to clean the monitor screen.

3. All floppy disk drives and tape drives should be cleaned periodically. Cleaning kits are available from a variety of sources. Carefully follow the instructions supplied with the cleaning kit you use.

4. Operating a system in a dusty or dirty environment significantly shortens its life and increases the probability of failure.

5. If you spill liquid inside the keyboard, unplug the keyboard immediately and turn it upside down to allow the liquid to drain out. Let the keyboard dry overnight before attempting to use it again. If it fails to work after drying document on a DA Form 2404/5988-E, and notify unit maintenance.

## **OPERATION**

### **CAUTION**

If your system is to be operated in cold weather and has been stored for an extended period, allow the system unit and monitor to warm up to room temperature. Exposing a cold computer to a warm room causes condensation that could damage the system. If condensation forms, wait for it to dry before plugging in the system.

The system requires good ventilation. Place it where air can circulate freely around it, and avoid locations in direct sunlight or near heaters or lamps. Never block the cooling fan opening. Avoid locations with high levels of dirt, dust, or smoke.

**CAUTION**

To prevent fire or shock hazard, do not expose the computer to rain, snow, or moisture.

Check the transit cases and computer/monitor chassis for damage. If the cases/chassis are damaged notify unit maintenance.

Make sure your computer is unplugged before connecting any peripherals, i.e., printers, monitors, and keyboards.

**CAUTION**

It is recommended that a surge/spike protector be used to help safeguard your equipment against any dangerous irregularities in the AC line. Uninterruptible power supplies are to be used, where provided, to protect against power loss.

**CAUTION**

Ensure that the equipment is connected to the correct power source. Failure to do so can result in damage to the hardware.

Procedures outlined are in accordance with the original equipment manufacturer (OEM) manuals for the hardware.

The functions and processes outlined are in accordance with the Standard Army Maintenance System Level 1 (SAMS-1) End User Manual (EUM) AISM 25-L21-AHN-ZZZ-EM, dated 1 June 1997.

Only those functions and processes that are applicable to a unit's mission are to be evaluated.

Table 1. Preventive Maintenance Checks and Services.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				<b>NOTE</b> Crew will inspect for damaged or missing items while performing checks.	
1	Before		Server and Workstation Central Processing Unit (CPU) Chassis, Exterior	Check for damaged or missing items.	Any damaged or missing items that will prevent operation
2	Before		Cables	Check for loose cables. Check for frayed or damaged cables.	Any loose or damaged cables that will prevent operation
3	Before		Monitor(s)	Check for damage to exterior. Check screen for scratches. Check cables for damaged or bent pins.	Any damage or scratches that will prevent operation or block vision
4	Before		Printer(s)	Check for damaged to exterior. Check for damage to connectors. Check for damaged or worn ribbon.  1. Make sure all pin rollers and gears operate smoothly. 2. Make sure paper will feed in properly. 3. Make sure all buttons operate properly.	Any item that will prevent operation
5	Before		Keyboard(s)	Check for damage to exterior. Check for damage to any keys. Check for damage to cable.	Any item that will prevent operation
6	Before		MODEM(s)	Check for damage to exterior. Check cables for damaged or bent pins.	Any item that will prevent operation
7	Before/After Monthly		Floppy Disk Drive(s)	Perform floppy drive cleaning procedures.	Any item that will prevent operation
8	Before/After Monthly		Tape Drive(s)	Perform tape drive cleaning procedures.	Any item that will prevent operation
9	During		Power-up Procedures	Perform OEM/EUM hardware power up procedures for all items to include peripheral devices (i.e., Printer(s), and MODEM).	Unable to power-up the CPU or monitor
10	During		Session Initialization	Perform Session Initialization procedures.	Unable to initialize session or sign-on
11	During		Maintenance Activity Processes	Work Order/Task Process Work Order Tasks Process Parts Process Inoperative Scroll Process	Unable to complete the Maintenance Activity Process.
12	During		Supply Activity Processes	Perform the Requisition Receipts procedures. Perform the Non-Requisitioned Receipts procedures. Perform the Shop Stock List procedures.	Unable to complete the Supply Activity Processes.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
13	During		Manpower Activity Processes	Perform the Bench Stock List procedures. Perform the Transfer Parts procedures. Perform the Off Line Status procedures. Perform the Supply Transaction procedures. Perform the Recoverable/excess Turn-In procedures. Perform the Document Register procedures. Perform the Initial Manpower Set Up procedures. Perform the Posting Manhours procedures. Perform the Manhour Accounting Transfer procedures. Perform the Reassigning Personnel procedures. Perform the Manpower Data Flow procedures. Perform the Manhour Accounting File procedures. Perform the Personnel File procedures. Perform the Update Work Days/Manhours procedures.	Unable to complete the Manpower Activity Processes.
14	During		Inquiry Activity Processes	Perform the Ad Hoc Inquiry procedures. Perform the Work Order Inquiry procedures.	Unable to complete the Inquiry Activity Processes.
15	During		Interface Activity Processes	Perform the Output procedures. Perform the Input procedures.	Unable to complete the Interface Activity Processes.
16	During		Supply Calculations/Purge Activity Processes	Perform the RO/ROP procedures. Perform the Follow-Up procedures. Perform the SSL Replenishment procedures. Perform the SSL Manual Inventory procedures. Perform the BSL Replenishment procedures. Perform the Purge Document Register procedures. Perform the Purge SSL Audit procedures. Perform the Purge RPM procedures.	Unable to complete the Supply Calculations/Purge Activity Processes.
17	During		Report Activity Processes	Perform the Maintenance Reports procedures. Perform the Supply Reports procedures. Perform the Manpower Reports procedures.	Unable to complete the Report Activity Processes
18	During		Master Files Activity	Perform the UIC Master File procedures.	

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
19	During		Processes	Perform the UIC Parameter Maintenance procedures.	Unable to complete the Master Files Activity Processes.
				Perform the Equipment Master File procedures.	
				Perform the Repair Parts Master File procedures.	
				Perform the Diskette/Comm Parameter File procedures.	
			Utilities Activity Processes	Perform the File Maintenance procedures.	Unable to complete the Utilities Activity Processes.
				Perform the Print Labels procedures.	
				Perform the Retransmit Comm procedures.	
				Perform the Work Order Transfer to SAMS-1/SMS-1 procedures.	
20	During		Communications Activity Processes	Perform the UIC Support Change procedures.	Unable to complete the Communications Activity Processes.
				Perform the BLAST Point-to-Point procedures.	
				Perform the COMM Monitor procedures.	
				Perform the CAISI BLAST procedures.	
				Perform the BLAST Concentrator procedures.	
				Perform the Communications Configurations procedures.	
21	During		Computer System Status Processes	Perform the Setting Up for Communications procedures.	Unable to complete the Computer System Status Processes.
				Perform the Printer Status procedures.	
22	During		Stopping and Suspending Work Procedures	Perform the ECP Status procedures.	
				Perform Log out.	Unable to log out of application
23	During/After		Power-down Procedures	Power-off CPU. Power-off Printer(s). Power-off MODEM.	Unable to Power-off CPU(s)